SCHOLAR

A programme of Heriot-Watt University

SCHOLAR Technical Requirements

Updated June 2014

1. Introduction

This document describes the software that is required to run the full range of SCHOLAR learning materials. The software consists of an Internet browser and specific plug-ins that extend the capabilities of the browser to display different types of files. The plug-ins are required to display the multimedia components that constitute a significant part of the students' interactions with the learning materials.

Each item of software has a version and release number, e.g. Internet Explorer 7.2 represents version seven release two. Each version of the software represents a significant development in functionality whereas releases represent smaller enhancements. In addition to versions and releases there are also service packs (SP). Service packs are cumulative updates to a product that fix existing problems and, in some cases, deliver improvements. Software can be downloaded from the manufacturers' web sites.

This document is aimed primarily at ICT Staff for their forward planning of IT provision and can also be used for guidance to staff and students who wish to access the online material from home.

The software specification is described in detail and, where appropriate, issues are flagged and links are provided to more extensive information at the manufacturers' web sites.

If technical staff wishes to contact us about any of these issues please e-mail:
info@scholar.hw.ac.uk

Individuals working from home should contact their Local Support Centre, Help Desk staff.

Note: where information within this document is platform specific it will be indicated with Either for Windows, or for Mac OS

2. What's New in 2014

June 2014
- Internet Explorer 7 is no longer supported
- Only the latest stable version of the following browsers will be supported: Chrome, Firefox, Safari and Opera
- Only the latest stable version of the required plugins will be supported.

3. Internet Content Rating

Content on our Virtual Learning Environment (VLE) is labelled using the Internet Content Rating Association (ICRA) scheme and also the RSACi scheme, which preceded ICRA. The labels represent levels of decency and acceptability of content.

The content rating is given when the owner of a web site completes a questionnaire. On the basis of this voluntary information a label is received and should then be included either on individual web pages or in the web server configuration. The labels conform to an Internet industry standard known as Platform for Internet Content Selection (PICS).

Individuals can then regulate access to web sites by altering the settings in the Microsoft Internet Explorer's Content Advisor or download and install a utility called ICRA filter.

Further information about labelling can be found at: http://www.icra.org/webmasters/

Content on our VLE has the following rating:

Moderated chat suitable for children and teens	(cb 1)
No potentially offensive language	(lz 1)
No images, descriptions or portrayals of nudity or sexual activity	(nz 1)
None of the descriptors in the "Other" category	(oz 1)
No images, descriptions or portrayals of violence of any kind	(vz 1)

This level code is the equivalent of the RSACi codes (n 0 s 0 v 0 l 0)

4. Automated System Detection

4.1 Login Page

The login page allows some quick tests to be performed to ensure that each computer fulfils each of the technical requirements as described in this guide.

The user's computer is automatically tested at the SCHOLAR login page. An information box message and a light-system are used to describe the current status of the user's system.

The system is based on JavaScript and is generally not considered to be a security risk to the browser or computer and is used by many websites.

4.1.1 Green Light

The user's system has installed all the required plug-ins to receive the best performance of SCHOLAR's interactivities.

Your system meets all the requirements of the SCHOLAR site.
Please click on the Traffic Light icon to retrieve more technical information.

4.1.2 Amber Light

The user's system does not have one or more additional plug-ins that improves the performance of SCHOLAR's interactivities. The additional plug-ins are:

* VRML

Your Browser was unable to detect 3 additional plugins required for specific subjects within SCHOLAR.
Please click on the Traffic Light icon to retrieve more technical information.

The user will be able to log into SCHOLAR but will not be able to use some of the interactivities.

4.1.3 Red Light

The user's system does not have one or more of the basic requirements installed to receive the benefits of SCHOLAR's interactivities. The basic requirements are:

* Adobe Flash Player
* Shockwave Player
* PDF Reader
* Java (JRE)
* Cookies (they must be enabled)
* Supported browser (See section 6. Browsers)

> Your Browser was unable to detect 2 requirements of the SCHOLAR site.
>
> Your Browser was also unable to detect 3 additional plugins required for specific subjects within SCHOLAR.
>
> Please click on the Traffic Light icon to retrieve more technical information.

It is NOT recommended to log in at SCHOLAR site at this stage.

4.1.3 Warning

When the user's browser does not support JavaScript, or has it disabled a warning message is displayed. JavaScript is used throughout the SCHOLAR site and is used to enhance the navigating and layout of the site. Without JavaScript basic navigation and interactive content will not be available.

4.2 List of Technical Information

Detailed technical information of the user's system is shown when the light-system is clicked. The technical information is divided into two tables, the first concerns your system settings and the second checks the plug-ins within your browser.

Each cell of the *status* column is either given a tick (✔) if the JavaScript was able to detect the plug-in, while a cross (✖) signifies a failed attempt to detect the plug-in. An exclamation (!) provides a warning that this version of the software is due to be deprecated in the near future.

The *Information* column confirms that the plug-in has already been installed. If not, the user is asked to install the required plug-in by clicking on the appropriate link.

5. Platforms

We currently fully support the Windows and Macintosh platforms. The range of operating systems (OS) that are suitable for the current specification is dictated by the intersection of the individual software manufacturers' own recommendations.

Windows

We currently support Windows 7 and above. Previous versions of Windows may not support all the features available.

Mac OS

We currently support Mac OS X; we do not support Mac OS 9

6. Browsers (New)

We aim to produce standards compliant web pages that should be viewable in any standards based web browsers. However, the table below includes the list of browsers we choose to actively support.

Our support strategy involves fixing any reported problems and actively testing developments to our system within the versions specified in the table below. For Internet Explorer this includes version 8 and above. For all other browsers the latest stable version will be supported. We also run automated browser tests once a month on all browsers within our support strategy to ensure compatibility is maintained:

Browser	Support Strategy
Internet Explorer	8+
Firefox	Latest Stable
Google Chrome	Latest Stable
Opera	Latest Stable
Safari	6+

Note on Internet Explorer: After December 2014 we will be dropping support for Internet Explorer 8.

While previous browser versions may continue to work, there is no guarantee future changes to our system will work on older versions. We always strongly advise you install the latest version to ensure you get access to the latest browser features and security updates.

6.1 Browser Configuration

In order to view content on our system you must configure your browser to:

- Accept cookies

- Enable JavaScript

- Show images

- Allow pop-ups

To find out how to do this, please see the help documentation for your chosen browser.

Cookies are used to login and track participation in online discussion groups and JavaScript is used for generating pop-up windows and components of the online self-assessment system. It is also involved in other interactions throughout the site.

To ensure that security is not compromised, we do not recommend that you configure your browser to remember your password.

Note on bookmarking. Although it is possible to bookmark individual pages of content you should be aware of the following:

- SCHOLAR URLs are dynamic and may change.
- If you are not logged in to SCHOLAR, the bookmark will take you to the login page. Once you are logged in the bookmark should take you to the bookmarked URL.

6.2 Internet Explorer

Download:
You can download the latest version of Internet Explorer for Windows from:
http://www.microsoft.com/windows/internet-explorer/default.aspx
You can no longer download Internet Explorer for Macintosh.

6.3 Firefox

Download:
You can download the latest version of Firefox from:
https://www.mozilla.org/en-GB/firefox/new/

6.4 Safari

Download:
You can download the latest version of Safari from:
http://www.apple.com/safari/download/
You can no longer download the latest version of Safari for Windows.

6.5 Opera

Download:
You can download the latest version of Opera from:
http://www.opera.com/download

6.6 Google Chrome

Download:
You can download the latest version of Google Chrome from:
http://www.google.co.uk/chrome

7. Plug-ins and downloads (New)

The plug-ins required to view all the content within SCHOLAR are listed below. We cannot support a plug-in that is not supported by the vendor itself. Therefore, our support strategy involves fixing any reported problems and actively testing developments to our system using the latest stable plug-in versions. It is advised to download the latest version from the vendor sites below:

Plug-in	Download site
Shockwave	http://get.adobe.com/shockwave/
Flash	http://get.adobe.com/flashplayer/
PDF Reader	http://get.adobe.com/uk/reader/
Java	http://www.java.com/en/download/index.jsp
VRML ( )	http://www.cortona3d.com/cortona3dviewer
VRML ( )	http://freewrl.sourceforge.net/download.html

7.1 Shockwave

The Shockwave plug-in is necessary to view the interactive animations created by the authoring tool, Macromedia / Adobe Director. The materials contain interactions created in Director version 8 which is best viewed in the latest stable version of the Shockwave player. The Shockwave download does not include the Flash player, this needs to be downloaded separately.

The Shockwave FAQ is at:
http://www.adobe.com/support/shockwave/ts/documents/playerfaq.htm

The FAQ mentions problems that may be encountered when installing the player and provides possible solutions. Some common problems include:

- damaged, pre-installed players preventing successful upgrades

Automatic Updates:
The HTML code for embedded Shockwave files contains a check to detect if the installed version of the player is able to play the file. If the currently installed player is an old version and a newer version is required then the code triggers an automatic update connection to the Macromedia web site.

When you install the player you are asked if you want 'Automatic updates'. We recommend that you **do not** check this option because it leads to automatic connections to the Shockwave download site approximately every two weeks. More information about how to disable the auto-update in Shockwave can be found here:
http://kb2.adobe.com/cps/166/tn_16683.html

You can test if your browser supports the most recent Shockwave Player by visiting the following site:
http://www.adobe.com/shockwave/welcome/

Download
You can download the latest version of the Shockwave plug-in from:
http://get.adobe.com/shockwave/

For the latest system requirements see:
http://www.adobe.com/products/shockwaveplayer/productinfo/systemreqs/

7.2 Flash Player

The Flash plug-in is necessary to view the interactive animations created using Macromedia Flash.

The Flash Player installation instructions are at:
http://www.adobe.com/products/flashplayer/productinfo/instructions/

The Flash FAQ is at:
http://www.adobe.com/software/flashplayer/productinfo/faq/

The FAQ mentions problems that may be encountered when installing the player and provides possible solutions. Some common problems include:

- damaged, pre-installed players preventing successful upgrades

Download
You can download the latest version of the Flash plug-in from:
http://get.adobe.com/flashplayer/

For the latest system requirements see:
http://www.adobe.com/products/flashplayer/systemreqs/

7.2.1 Mobile Devices

Adobe has officially dropped Flash Player support for mobile devices. Since our content still contains a large number of Flash activities the following workarounds can be considered.

7.2.1.1   Puffin Academy Browser (New)

The Puffin Academy Browser is a freely available browser for both Android and iOS devices. To get round the issue of circumventing web filtering policies it only accepts URLs from a whitelist of approved sites.

You can install Puffin Academy Browser from one of the following app stores:
- Google Play
  https://play.google.com/store/apps/details?id=com.cloudmosa.puffinAcademy
- iTunes
  https://itunes.apple.com/us/app/puffin-academy/id716707933

Once you have it installed and running on your device you will not be able to edit the URL bar. Instead you can make use of Bookmarks to get access to SCHOLAR.
1) Select "Add Bookmarks" from Puffin Academy options.
2) Set the name to: SCHOLAR
3) Set the location to: http://scholar.hw.ac.uk/login
4) Click save
5) Select "Bookmarks" from Puffin Academy options.
6) Select "SCHOLAR" from the list of Bookmarks

SCHOLAR Unit, Heriot-Watt University 2014

7.2.1.2 Adobe Flash for Android

Please note Adobe Flash for Android is not officially supported by Adobe and therefore the steps below are provided for information purposes only. No warranty is made as to the accuracy or fitness for purpose.

1) Enable applications to be installed outside the Google Play Store
    i. Open the **Settings** menu on your device.
    ii. Select **Security** (or Applications, on older Android OSs).
    iii. Place a tick next to **Unknown sources**
    iv. Tap **OK** to confirm your selection and close the settings.
2) Install Dolphin Browser app
    i. Install Dolphin Browser from the Google Play store:
        https://play.google.com/store/apps/details?id=mobi.mgeek.TunnyBrowser&hl=en
3) Install Flash for Android
    i. Download the following file directly to your device:
        http://download.macromedia.com/pub/flashplayer/installers/archive/android/11.1.115.81/install_flash_player_ics.apk
    ii. Run "install_flash_player_ics.apk" and follow the instructions given by the Package installer.
4) Enable Flash for Dolphin Browser
    i. Open Dolphin Browser and access its **Settings**.
    ii. Next tap **Web Content** and then **Flash Player**.
    iii. Choose between **On Demand** and **Always On**.

7.3 PDF Reader

Any type of PDF Reader that is capable of viewing Portable Document Format (PDF) files can be used to read PDF files placed throughout the SCHOLAR site. This could be the Adobe PDF Reader plugin, a non-Adobe PDF plugin, or a PDF viewer that is built in to the browser.

Unfortunately we only have the resources to officially support Adobe Reader but we understand that other PDF Readers are available and users should not be penalised for choosing an alternative. This freedom is especially critical when Adobe Reader is not available on their platform or mobile device.

Download:
The latest version of Adobe Reader can be downloaded from:
http://get.adobe.com/uk/reader/

For the latest system requirements see:
http://www.adobe.com/products/reader/systemreqs/

7.4 Java

Some of the SCHOLAR simulations are written in Java or make use of Jmol and a Java plug-in is required to view these.

For Mac users you can use the Software Update feature (available on the Apple menu) to check that you have the most up-to-date version of Java for your Mac.

Download
Java can be downloaded from:
http://www.java.com/en/download/index.jsp

For the latest system requirements see:
http://java.com/en/download/help/sysreq.xml

7.5 VRML

Some Computing materials contain VRML objects. To view these, your web-browser must be VRML enabled.

For Windows we recommended using the Cortona3D Viewer. The Cortona3D Viewer Licensing Options states it's available to academic institutions free of charge. On further clarification from Cortona3D, this allows Local Education Authorities (LEAs) to download and install the Cortona3D VRML viewer on all required computers without incurring a charge. Under this agreement, Cortona3D permits LEAs to freely use the Cortona3D VRML viewer for non-commercial purposes within the LEA, however, should this be required for use within a university, a charge will be incurred.

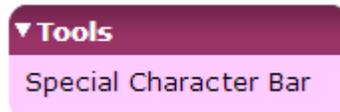For Mac and Linux we suggest you use FreeWRL.

Download
FreeWRL:
http://freewrl.sourceforge.net/

Cortona3D Viewer:
http://www.cortona3d.com/cortona3dviewer

Other VRML clients and detection can be found here:
http://cic.nist.gov/vrml/vbdetect.html

7.6 Special Character Bar

The Special Character Bar provides an easy way of typing in language accent characters or symbols. A pop-up window of buttons is provided for each language that allows a user to type in these characters at the cursor.

It can be downloaded from the Tools menu which can be seen once you are logged into SCHOLAR.

▼ Tools

Special Character Bar

MAC users and PC users, without the Special Character Bar, can input the relevant characters using a combination of keys. An example of how to use French accent characters is given at http://courses.scholar.hw.ac.uk/vle/scholar/ahfrench/accents.html

7.7 Live Online Sessions

Public live online sessions are available to watch by anyone without requiring a SCHOLAR login. The sessions make use of Adobe Connect, a web conferencing platform that can be used for eLearning. More information can be found here: http://www.adobe.com/uk/products/adobeconnect.html

All modern web browsers support Adobe Connect via the Adobe Flash 10.3 (or higher) plugin, while Android, BlackBerry and iOS apps are available to install on compatible devices. Audio speakers or headphones are required to listen to the presenter. Please make sure to set up your device in advance of sessions.

For full technical specifications see: http://www.adobe.com/uk/products/adobeconnect/tech-specs.html

To see when the next available session is scheduled please check to the following page: http://scholar.hw.ac.uk/Scotland/Resources/Live_Online_Sessions

8. Network Settings

8.1 Caching

When people log into the materials a server-side 'session' is created. Each session is unique and controls the person's access to the content. Pages need to be requested from the central server on-demand and should, therefore, not be cached on proxy servers.

8.2 Logging Out

Users should log-out and close browsers at the end of a SCHOLAR session to ensure that the following user is correctly identified by the system.

8.3 Time Outs

The course materials contain on-line assessments, which are typically scheduled to take from 10-30 minutes of work. It may be worth checking that any time-out set by your ICT team would allow for this length of activity. If you use I-Gear then the Internet access timeout should be extended to accommodate extended periods of work. The SCHOLAR session time-out is set to 45 minutes.

8.4 Service and port settings

The entry point to the on-line materials is at: **http://scholar.hw.ac.uk/login**
There are three sub-systems behind scholar.hw.ac.uk (`137.195.151.219`) that should be enabled through firewalls or web filtering software and they have the following base URLs:

- **http://courses.scholar.hw.ac.uk**   (137.195.151.210)
- **http://discuss.scholar.hw.ac.uk**   (137.195.151.213)
- **http://assess.scholar.hw.ac.uk**   (137.195.151.212)

All sites are now served from port 80 and this port needs to be open through the Firewall of your Institution, Local Education Authority or Internet Service Provider (ISP).

9. Screen Resolution

The minimum screen resolution for which the web pages are designed is now 1024 by 768. This enables large animations and graphics to be viewed with minimal scrolling.